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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,191

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Yelena Shulepova

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

04/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,191

Applicant(s)

SHULEPOVA ET AL.

Examiner

JOSHUA L. PRITCHETT

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Request for Continued Examination filed March 18, 2008 and Amendment filed February 7, 2008. Claims 1 and 11 have been amended as requested by the applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 11 and 17-22 are rejected under 35 U.S.C. 102(c) as being anticipated by Doi (US 2003/0099045).

Regarding claims 1 and 11, Doi discloses a central lens element (20) having an optical axis (parallel to 28) and located centrally of a circumjacent mounting portion having spaced parallel surfaces that extend perpendicularly to the optical axis a non-random light scattering structure (32) for coupling out light entering the mounting portion, the non-random light

scattering structure being located on at least one of the spaced parallel surfaces (para. 0033, 0038; Fig. 4; the Doi states non-reflective structures both scatter and absorb and 32 is a non-reflective structure) and light absorbing means adjacent the non-random light scattering structure and configured to absorb light scattered from the non-random light scattering structure (para. 0033) and reduce ghosting of images displayed on a screen (para. 0037).

Regarding claims 17-22, Doi discloses the light scattering structure is located on both of the parallel surfaces (Fig. 4) and includes a first structure and a second structure the first structure (right side 32) of the light scattering structure being located on a first surface of the parallel surfaces, the first surface being near an image plane (light coming in at Lo) that is configured to receive the light coupled out of the light scattering structure and the second structure (left side 32) of the light scattering structure being located on a second surface of the parallel surfaces further from the image plane (Fig. 4). Doi further discloses the light absorbing means are located on the first surface (para. 0033; light absorbing means are located on both surfaces).

Claims 1-7 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (US 5,550,657).

Regarding claims 1 and 11, Tanaka discloses an optical lens component comprising a central lens element (23) having an optical axis and located centrally of a circumjacent mounting portion (Fig. 3) having spaced parallel surfaces that extend perpendicularly to the optical axis (interfaces between 23 and 27 and 23 and 26), the spaced parallel surfaces being provided with a non-random light-scattering structure (26) for coupling out light entering the mounting portion

(Fig. 3). Tanaka discloses the light absorbing means (22a) are provided adjacent at least one non-random light-scattering structure (26; Fig. 3; col. 7 lines 66-67).

Regarding claims 2 and 12, Tanaka discloses the non-random light-scattering structure comprises indentations having parallel light-scattering surfaces with predetermined inclinations relative to the spaced parallel surfaces (Fig. 3).

Regarding claims 3 and 13, Tanaka discloses the indentations comprise at least one array of concentric circular indentations centered on the optical axis of the lens element (Fig. 25). Examiner interprets "concentric circular indentations" to be similar to those shown in Figs. 3-4 of the current application, since these are the only drawings that show views of the indentations. The indentations of Fig. 25 in Tanaka resemble the indentations shown in Figs. 3-4 of current application.

Regarding claims 4 and 14, Tanaka discloses the indentations in at least one array have triangularly shaped cross sections in a plane in which the optical axis of the lens is located (Fig. 3).

Regarding claims 5 and 15, Tanaka discloses all indentations have identically shaped cross sections in at least one array (Fig. 3).

Regarding claims 6 and 16, Tanaka discloses the triangular shape is asymmetrical relative to a local perpendicular (Fig. 25).

Regarding claim 7, Tanaka discloses the triangular shape comprises a right angled triangle having one leg lying in the plane of the respective spaced parallel surface of the mounting portion, the second leg being disposed on the side of the triangle facing the central axis (Fig. 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (US 5,550,657) in view of Ohkawa (US 6,568,820).

Tanaka teaches the invention as claimed but lacks reference to molding. Ohkawa teaches the use of molding to create the optical lens element (col. 6 lines 11-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Tanaka invention created by molding as taught by Ohkawa for the purpose of precise and efficient reproduction of the light-scattering structure.

Response to Arguments

Applicant's arguments filed March 18, 2008 have been fully considered but they are not persuasive.

Applicant argues Doi fails to teach a light scattering structure. The examiner interprets light scattering and light diffusion to be functionally equivalent because both disperse the light beam to expand the beam width and reduce the intensity of the beam within the beam diameter.

Applicant argues Doi teaches the non-reflective part is only parallel to the optical axis. Fig. 4 of Doi shows the non-reflective portion extending along the base of the central lens element is a direction perpendicular to the optical axis. The optical axis in Fig. 4 extends from (24) to (25) and the bottom portion of the lens element where (32) is located is orthogonal to that optical axis.

Applicant argues Tanaka does not teach the light scattering structure being perpendicular to the optical axis. The optical axis in Tanaka is the direction of the light propagating out of the assembly as shown by the arrows in Fig. 3. The surface of 26 runs perpendicular to that optical axis.

Applicant's arguments, see Amendment, filed March 18, 2008, with respect to the rejection(s) of claim(s) 1 under Tanaka in view of Hattori have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tanaka. Further review of the Tanaka reference shows that the Tanaka reference teaches all the claimed limitations as set forth in the rejection above. The Hattori reference is no longer required to teach all the claimed limitations and therefore arguments directed to Hattori are moot.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA L. PRITCHETT whose telephone number is (571)272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua L Pritchett/
Primary Examiner
Art Unit 2872